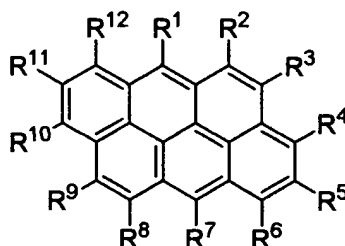


ABSTRACT

An organic luminescent material including a compound of the following formula:



wherein:

- 5 $R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}$ and R^{12} are individual groups, and at least one group is not hydrogen among the R^1, R^3, R^7 , and R^9 groups.

Group 1: hydrogen, or alkyl of from 1 to 48 carbon atoms, and each $R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}$ and R^{12} can connect with their neighboring group to form 5 or 6 member cyclic or aromatic ring system, and

- 10 Group 2: aryl or substituted aryl of from 5 to 48 carbon atoms, or 4 to 48 carbon atoms necessary to complete a fused aromatic ring of naphthenyl, anthracenyl, pyrenyl, or perylenyl; and

- Group 3: heteroaryl or substituted heteroaryl of from 5 to 24 carbon atoms, or 4 to 48 carbon atoms necessary to complete a fused heteroaromatic ring of furyl, thienyl, pyridyl,
15 quinolinyl and other heterocyclic systems; and

Group 4: alkoxyl, amino, alkyl amino, aryl amino dialkyl amino, or diaryl amino of from 1 to 24 carbon atoms; and

Group 5: a group consist of F, Cl, Br, I, CN, NCS, NCO, B(OH)₂, B(OCH₂CH₂O), B[OC(CH₃)₂C(CH₃)₂O], SO₂ R¹³, SO₃ R¹⁴, SO₂NR₂, SiR₃, SiHR₂, SiR₂OH, where R, R¹³ and R¹⁴ is hydrogen, chlorine, bromine, alkyl group containing 1-12 carbon atoms, and aryl; and

Group 6: a group of formula -LY_nR¹⁵ where n is 0 to 18, Y is a alkyl group contains 1 to 24 carbon atoms, R¹⁵ is a hydrogen, hydroxy, amino, alkylamino, arylamino, alkyl arylamino, diarylamino, dialkylamino, or -COR¹⁶ where R¹⁶ is a hydrogen, chlorine, COCl, alkyl group containing 1-12 carbon atoms, --NR₂, -NHR and aryl, or -COOR¹⁷ where R¹⁷ is a hydrogen, alkyl group containing 1-12 carbon atoms, aryl, COR, 2,4-dinitrophenyl, N-imido or -NR₂; and L is a direct bond or C=O.

PARTS LIST

5	100	EL Device
	102	Substrate
	104	Anode
	106	Cathode
	108	Organic EL medium
10	110	Hole-transport layer
	112	Electron-transport layer
	114	External power source
	116	Conductor
	118	Conductor
15	120	Holes
	122	Electrons
	200	EL device
	202	Substrate
	204	Anode
20	206	Cathode
	208	Organic EL medium
	210	Hole-transport layer
	212	Luminescent layer

	214	Electron-transport layer
	300	EL device
	302	Substrate
	304	Anode
5	306	Cathode
	308	Organic EL medium
	310	Hole-injection layer
	312	Hole-transport layer
	314	Luminescent layer
10	316	Electron-transport layer
	318	Electron-injection layer